

RESEARCH DESIGN AND METHODS

Page 1



Stop



1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

Customer:



Run Start

Date:

Date:

Stop

Draw Nbr	Revision Nbr
D3648	Rev B

0.00

Abstract

Packaging

Memo

0.00

Packaging

110

1. The first step is to identify the problem or question that needs to be addressed. This involves understanding the context and the specific requirements of the task.

2. The second step is to gather relevant information and resources. This may involve researching existing solutions, consulting with experts, or collecting data.

3. The third step is to develop a plan or strategy. This involves breaking down the problem into smaller, manageable tasks and determining the sequence of actions to be taken.

4. The fourth step is to implement the plan. This involves carrying out the tasks and monitoring progress to ensure that the plan is being followed.

5. The fifth step is to evaluate the results. This involves comparing the actual outcomes with the expected results and identifying any areas for improvement.

6. The sixth step is to communicate the findings. This involves sharing the results of the analysis with the relevant stakeholders and providing recommendations for future action.

7. The seventh step is to review the process. This involves reflecting on the entire process and identifying any lessons learned that can be applied to future tasks.

Small Fab

Small Fab

Small Fab

Memo

0.00

0.00

1-Assemble as per dwg D3648 2- Seal mating surface and all gaps as per dwg D3648 with Proseal 700 fire wall sealant batch: MIL 669

120



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 67752

Wednesday, March 30, 2011 10:13:08 AM



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Item ID: D3648-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Driveshaft Tunnel Assembly

Start Date: 3/30/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 4/1/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 Packaging	Identify as per dwg & Stock Location: _____ Memo	0.00 0.00							
140 QC	QC21- Final Inspection - Work Order Release Memo	0.00 0.00							
Packaging									
Quality Control									

11/5/19 (2) f

11/5/19 J

11-05-19 (2)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Wednesday, March 30, 2011 10:13:14 AM

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[illegible]

Required Qty: 2.00

Comments:	IPP Rev:A	New Issue	07-10-03	EC	verified by: DD
	IPP Rev:B	Ecn 1113P	08-01-22	DD	verified by:EC
	IPP Rev:C	ECN1162	08-04-02	DD	verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN960C10	NAS1149C0363 R	Purchased	No			100	Each	0.0000	40	80			
WASHER													
AN3C3A		Purchased	No			110	Each	156.0000	40	80			
Bolt													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST350		156							
				116704		52							
				117161		104							
D3649-041		Manufactured	No			110	Each	5.0000	1	2			
Tunnel Bottom Panel Assembly													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST190		5							
				65548		5							
D3650-041		Manufactured	No			110	Each	0.0000	1	2			
Tunnel Top Panel Assembly													
D3651-041		Manufactured	No			110	Each	0.0000	1	2			
Aft Base Assembly													

W/O:		WORK ORDER CHANGES					
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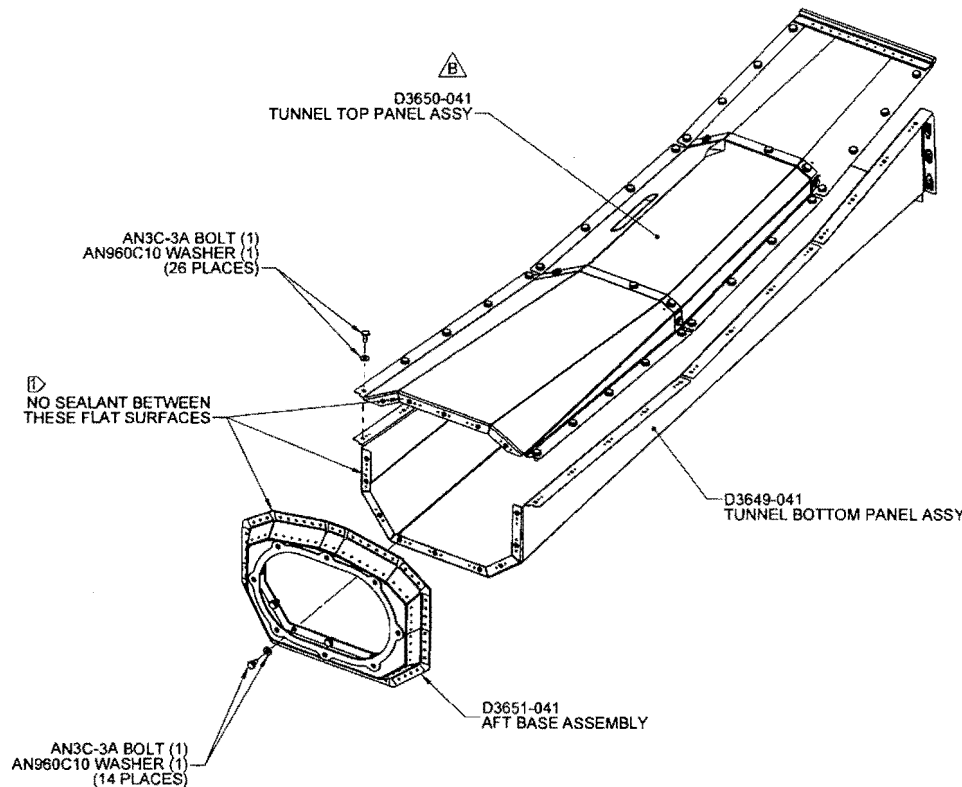
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 67752
11-03-30



D3648-041 DRIVE SHAFT TUNNEL ASSEMBLY

NOTES:

- 1) SEAL MATING SURFACES AND ALL GAPS USING PROSEAL 700 FIRE WALL SEALANT EXCEPT WHERE NOTED
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N D3648-041 USING FINE POINT PERMANENT INK MARKER
- 7) TORQUE FASTENERS TO 15-25 in-lb
- 8) WEIGHT: 9.2 lbs

PART LIST

QTY -041	PART NUMBER	DESCRIPTION
X	D3648-041	DRIVE SHAFT TUNNEL ASSEMBLY
1	D3649-041	TUNNEL BOTTOM PANEL ASSEMBLY
1	D3650-041	TUNNEL TOP PANEL ASSEMBLY
1	D3651-041	AFT BASE ASSEMBLY
40	AN3C-3A	BOLT
40	AN960C10	WASHER

RELEASED
08.03.27/10

B	UPDATE WITH REVISED D3650-041	RF	08.01.07
A	NEW ISSUE	RF	07.11.07
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	IE	DRAWING NO.	REV. B
MFG. APPR.	DA	D3648	SHEET 1 OF 1
APPROVED	DA	TITLE	SCALE
DE APPR.	DA	DRIVE SHAFT TUNNEL ASSY	1.6
DATE	08.01.07	<small>COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COMPLETED COMMERCIALITY TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

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